



RESEARCH REPORT

Catalog number	99006
Date:	May 3, 1999
Subject:	Office of Medical Examiner Benchmark Comparison
To:	David R. Smith, County Administrative Officer
From:	Sandi Wilson, Deputy County Administrator Chris Bradley, Budget Manager
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Issue

Is the Office of the Medical Examiner lacking the resources to provide a full range of services to the citizens of Maricopa County? Provide a uniform comparison to the six other counties used in the Internal Audit report to examine the possibility of the Medical Examiner being under funded.

Background

The Office of the Medical Examiner (OME) has for several years requested increased funding for several needed issues such as personnel, equipment, and space. A Comprehensive Program Budget Review (CPBR) was completed in FY 1995/1996 addressing those issues. The report revealed that budget increases for OME were not consistent with Maricopa County population increases. Other areas of concern with in the report were staffing, space, caseload, equipment, automation, and charge/fee structure. Based on data collected on 6 other medical examiner agencies, OME was well off the averages in several areas. The population for Maricopa County was .3 million over the norm, the number of pathologists were 3.4 below the norm, and the OME budget was approximately \$1.8 million under the norm. OMB recommended several options:

1. Each program within OME be fully evaluated and benchmarks be identified through workload and performance measures for goal evaluation.
2. Human Resources examine current classifications due to the high turnover rate.
3. 19 new positions created to alleviate massive overflow of cases. These included all positions from Pathologist to Transporters.
4. A feasibility study be done for contracting all or a portion of the lab functions.
5. Corporate Business Technology (CBT) prepare a formalized recommendation regarding computer hardware and software.

Catalog number	99006
Date:	January 19, 1999
Subject:	Office of Medical Examiner Benchmark Comparison
Page:	2

Several recommended options have been implemented providing the OME with temporary relief.

In September 1998, the Internal Audit Department completed an Audit report in conjunction with their annual plan. Attached to the report was an addendum that benchmarked OME to six other counties. The counties are: Tarrant County, TX; Dade County, FL; Bexar County, TX; Oakland County, MI; Clark County, NV; and Pima County, AZ.. Each was chosen for their similar characteristics that match Maricopa County. Each county supplied data asked of them on an 18-question survey. Each county was asked what their annual budget amounts over a three-year period. Counties responded with total budgeted amounts, not line item budget information. OMB contacted these counties and received line by line budget information. A fairer comparison between Maricopa County OME and these counties can be made with this data.

Discussion

The Office of the Medical Examiner's budget was examined and compared to six other counties. It was found that the budgets of the other counties included services that were not available through Maricopa County's OME. These services include security divisions, utilities, and capital outlay expenses. The security division was discarded from the other counties because OME does not utilize one. Utilities were discarded because Maricopa County pays them out of General Government if the agencies are located in the general fund. The capital outlay was discarded because of the possibility of being a one-time expenditure. OMB also adjusted grant match funding. This showed as a credit against the other county's total budget. It was determined that to have realistic operations cost, these items should be removed from the total dollar amount. The unadjusted and adjusted budgets for the counties are listed below:

Annual Budget							
Year	Maricopa County	Tarrant County	Dade County	Bexar County	Oakland County	Clark County	Pima County
Unadjusted							
FY 1995/1996	\$1,408,267	\$2,711,384		\$1,882,000	\$1,890,774	\$1,362,964	
FY 1996/1997	\$2,356,522	\$2,981,354	\$7,121,239	\$1,990,000	\$2,079,022	\$1,469,777	
FY 1997/1998	\$2,495,005	\$3,199,144	\$6,542,000	\$2,296,000	\$2,391,007	\$1,573,642	\$1,016,688
Adjusted							
FY 1995/1996	\$1,408,267	\$3,029,700		\$1,766,633	\$1,863,736	\$1,358,603	
FY 1996/1997	\$2,356,522	\$3,331,388	\$5,569,521	\$1,868,013	\$2,049,292	\$1,465,074	
FY 1997/1998	\$2,495,005	\$3,334,387	\$5,087,100	\$2,009,841	\$2,356,869	\$1,568,730	\$1,012,056

Before and after the budgets were adjusted, Maricopa County ranked third on the list of counties. But several other factors must be taken into consideration before a decision can be made concerning OME's budget. These are the size of the population, the rate

Catalog number	99006
Date:	January 19, 1999
Subject:	Office of Medical Examiner Benchmark Comparison
Page:	3

of autopsies to caseload, the dollar per caseload and autopsy, and the usable space. Maricopa County's population has increased from 2.3 million in 1993 to 2.7 million in 1997, a 17% increase in a five-year period. Below is the population table for all the counties for the last three years:

Population

Year	Maricopa County	Tarrant County	Dade County	Bexar County	Oakland County	Clark County	Pima County
FY 1995/1996	2,613,409	1,300,157	2,037,509	1,313,975	1,159,309	1,046,498	767,743
FY 1996/1997	2,696,198	1,327,332	2,044,600	1,332,547	1,166,512	1,106,047	780,150
FY 1997/1998	2,869,846	1,355,073	2,051,756	1,351,335	1,173,744	1,168,981	792,788

Maricopa County has the highest population of all counties surveyed. When related to the budget, the cost per thousand capita is \$ 870. That is \$ 970 below the average of the other counties. There seems to be a definite contrast between budgets relative to population size.

Review of caseloads and autopsies: In becoming a accredited office, OME is allowed no more than 250 autopsies per doctor to receive full accreditation from the National Association of Medical Examiners (NAME). Currently OME employs six medical examiners. There were seven, but one has left and there is the possibility of another leaving in February/March. Each doctor is responsible for over 500 cases with 325 being autopsies. Below are the annual caseload and autopsy numbers with a percentage of autopsies to caseloads:

County	Caseload			Autopsy		
	FY 1995/1996	FY 1996/1997	FY 1997/1998	FY 1995/1996	FY 1996/1997	FY 1997/1998
Maricopa	3,578	3,549	3,596	1,737	1,674	2,276
Tarrant	1,292	1,262	1,621	1,011	975	1,228
Dade	3,459	3,341	3,137	2,451	2,464	2,416
Bexar	1,862	1,962	1,907	1,162	1,243	1,175
Oakland	3,978	4,430	4,145	783	896	879
Clark	4,967	5,528	5,802	752	978	1,031
Pima	1,829	1,719	1,747	1,095	966	881

Autopsy/Caseload

Year	Maricopa County	Tarrant County	Dade County	Bexar County	Oakland County	Clark County	Pima County
FY 1995/1996	49%	78%	71%	62%	20%	15%	60%
FY 1996/1997	47%	77%	74%	63%	20%	18%	56%
FY 1997/1998	63%	76%	77%	62%	21%	18%	50%

The caseload for Maricopa County has relatively remained unchanged over a three-year period. But remaining unchanged causes a phase 1 deficiency in becoming accredited. Only two out of the 6 counties meet the NAME standard and Dade and Bexar Counties have been accredited. The area of concern is the autopsy per

Catalog number	99006
Date:	January 19, 1999
Subject:	Office of Medical Examiner Benchmark Comparison
Page:	4

caseload percentage rate. Three years ago, Maricopa County was performing at a rate of 49%, which is average to all of the other counties. In FY 1997/1998, the level was increased to 63% for Maricopa County. The new percentage according to Dr. Philip Keen is due to court-related testimonies and Sudden Infant Death Syndrome which have been brought to the forefront of the general public. Because of this, OME has not been able to reach accreditation status. The totals will be used to determine the caseload and autopsy operational costs. Below are charts clarifying the per dollar cost for both caseloads and autopsies:

Chart 1:

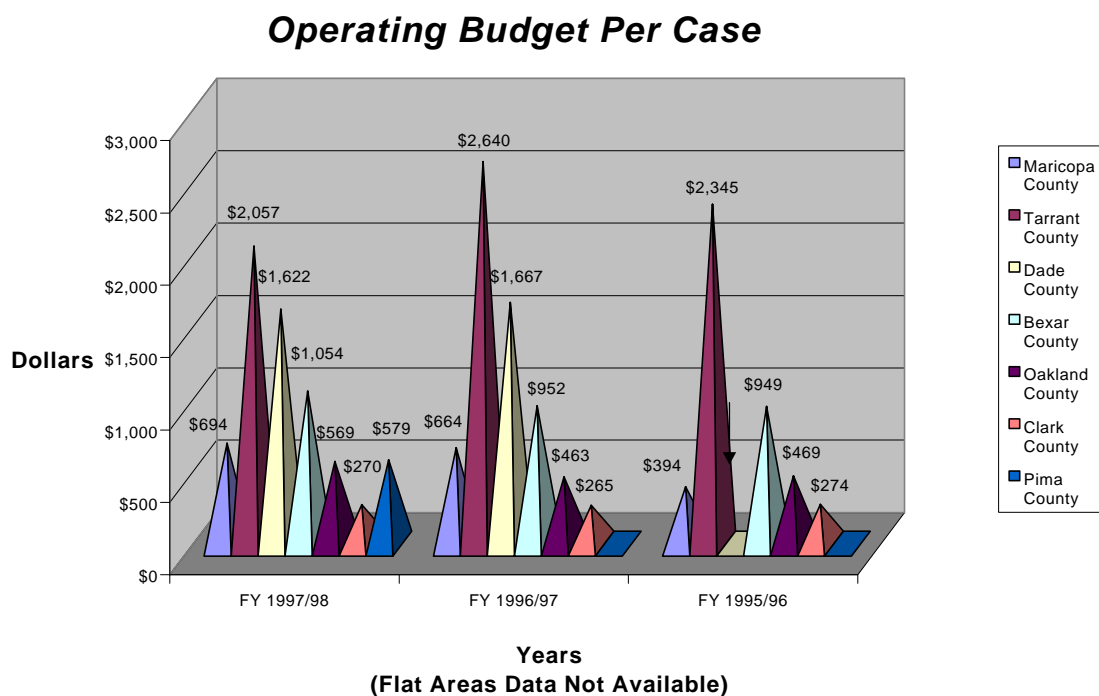
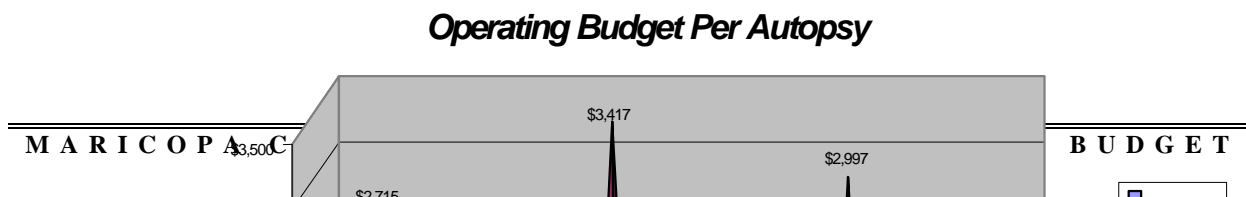


Chart 2:



Catalog number	99006
Date:	January 19, 1999
Subject:	Office of Medical Examiner Benchmark Comparison
Page:	5

In looking at chart 1, Maricopa County is located in the middle of the chart for dollars per case. Although they have the highest population rate out of all counties, OME ranks forth on dollars spent per case. Chart 2 shows the operational cost per autopsy. As of 1998, the OME budget is \$1,096 per autopsy. The average of all other counties is \$1,854. The operational cost per autopsy is well below the average. This is due to limited personnel.

Another factor is space. OME occupies a building that was built in 1975. The total square footage for the facility is 10,500 square feet of usable space. Maricopa County is ranked fifth in size compared to the other counties and will soon be sixth. Oakland County is in the process of completing their new ME facility which places Maricopa County to sixth. Because of the limited space, there are only two fully operational autopsy tables. The rooms for lab work are over crowded with equipment. Personnel occupy very limited areas. Several dilemmas have arisen because of the limited space. The first is the work environment. Dr. Keen has informed OMB that the lack of space has caused doctors to work longer hours because of the limited space for autopsies. There is always a backlog of doctors requiring the use of an autopsy table. The doctors are always being rushed to complete the autopsy. Lack of space and availability of autopsy tables contributes to the employee turnover rate. Because of the work environment (long hours, space constraints, time constraints), doctors are leaving the County. They are able to work in positions that are less stressful with the equipment they need.

Conclusion

The purpose of benchmarking the Office of the Medical Examiner to other counties is to learn how to improve the work environment and increase satisfaction for both the department and general public. In analyzing information from several sources, the

Catalog number	99006
Date:	January 19, 1999
Subject:	Office of Medical Examiner Benchmark Comparison
Page:	6

benchmark project took into consideration several factors that gave a more realistic analysis. These factors have indicated that OME is under-funded and is in desperate need of more space. The population statistics, caseload and autopsies per doctor, and the operational cost per caseload and autopsy confirm this as well as the lack of accreditation. The study, both by Internal Audit and Budget, will provide a useful baseline for future plans.

	FY 1995-96 Actual	FY 1996-97 Actual	FY 1997-98 Actual	FY 1998-99 Current	FY 1999-00 Recommended
Personnel	\$ 1,152,208	\$ 1,868,982	\$ 2,070,778	\$ 2,297,685	\$ 2,570,936
Operations	\$ 380,030	\$ 567,329	\$ 388,774	\$ 321,074	\$ 455,033
Total	\$ 1,532,238	\$ 2,436,311	\$ 2,459,552	\$ 2,618,759	\$ 3,025,969
% Change		59%	1%	6%	16%

As illustrated in the table above, OME's budget increased \$1,086,521 or by 70% between FY 1995-96 and FY 1998-99. In addition, as outlined below, OMB recommends an additional appropriation of \$393,838 for FY 1999-00, a 16% increase over the current fiscal year (FY 1998-99). With the additional funding recommendation, the OME's budget is anticipated to increase by \$1,493,731 or 97% since FY 1995-96.

Recommendation

OMB recommends that \$393,838 be appropriated to the Office of the Medical Examiner for FY 1999-00, with an additional \$220,000 to be reserved within General Government Appropriated Fund Balance to provide for additional space until the OME is able to move to a new location. It is also recommended that the OME use anticipated budget savings during the current fiscal year (FY 1998-99) to purchase one-time capital equipment needed within the Office.

The \$393,838 is recommended to:

- Increase staffing levels by one Medical Examiner, a half-time Chemist, and one Transcriber. This will allow the OME to significantly reduce the caseload per doctor ratio. The other positions are the support staff for the additional ME position;
- Provide funding for 2.5 % merit increases and market adjustments to reduce turnover, improve moral, and increase operational efficiencies;
- Replace outdated/obsolete equipment (van upgrades, Slide Stainer, 3 Robotic Samplers). The transport vans will increase the OME's transport capacities and the purchasing of the other equipment will reduce maintenance costs and increase operational efficiencies; and

Catalog number	99006
Date:	January 19, 1999
Subject:	Office of Medical Examiner Benchmark Comparison
Page:	7

- Provide funding for Maricopa Integrated Health System laboratory and laundry costs that have not been charged to the OME in previous fiscal years.

In addition, OMB recommends capital project funding to commence design and construction for a new Medical Examiner facility in FY 1999-00. The current estimate for Facilities Management to complete this project is \$13.5 million. The facility would be ready for use in FY 2001-02.